

CLAIMS:

1. A method of preventing or reducing transport of a neurotropic virus within a neuron or cell, the method comprising providing to said neuron or cell a compound preventing binding between a structural tegument protein of the virus and a motor protein in the neuron or cell such that virus transport in the neuron or cell is prevented or reduced.
2. The method according to claim 1 wherein the neurotropic virus is selected from the group consisting of Herpes simplex virus, varicella-zoster virus, and rabies virus.
3. The method according to claim 2 wherein the virus is Herpes simplex virus, the structural tegument protein is US11, and the motor protein is kinesin.
- See AI* 4. The method according to any one of claims 1 to 3 comprising providing to a neuron or cell a compound capable of altering or preventing interaction between a structural tegument protein of a neurotropic virus and a motor protein in the neuron or cell.
5. The method according to claim 4 wherein the compound is a motor protein-like molecule which binds to a structural tegument protein of the virus thereby preventing the normal interaction of the virus and neuron or cell.
6. The method according to claim 5 wherein the motor protein-like molecule comprises a mimic of a cellular motor protein or a part of the motor protein to which the structural tegument protein binds.
7. The method according to claim 6 wherein the virus is Herpes simplex virus, the motor protein is kinesin and the motor protein-like molecule is a mimic of kinesin or a part of kinesin to which the structural tegument protein US11 of Herpes simplex virus binds.
8. The method according to claim 4 wherein the compound is a structural tegument-like molecule which binds to a motor protein of a neuron or cell thereby preventing the normal interaction between the neuron or cell with the virus.
9. The method according to claim 8 wherein the structural tegument-like molecule comprises a mimic of a viral tegument protein or a part of the tegument protein to which a cellular motor protein binds.

10. The method according to claim 9 wherein the virus is Herpes simplex virus, the structural tegument protein is US11, motor protein is kinesin and the structural tegument-like molecule is a mimic of US11 or a part of US11 to which the motor protein kinesin binds.

Sub 02 5 11. A method according to any one of claims 1 to 10, wherein the method prevents or reduces transport of a neurotropic virus within a neuron.

12. An antiviral composition comprising a compound capable of preventing binding between a structural tegument protein of a neurotropic virus and a motor protein in a neuron or cell.

10 13. The antiviral composition according to claim 12 wherein the neurotropic virus is selected from the group consisting of Herpes simplex virus, varicella-zoster virus, and rabies virus.

14. The antiviral composition according to claim 13 wherein the virus is Herpes simplex virus, the structural tegument protein is US11, and the motor protein is kinesin.

Sub 03 15 15. The antiviral composition according to any one of claims 12 to 14 wherein the compound a motor protein-like molecule which binds to a structural tegument protein of the virus thereby preventing the normal interaction of the virus and neuron or cell.

20 16. The antiviral composition according to claim 15 wherein the motor protein-like molecule comprises a mimic of a cellular motor protein or a part of the motor protein to which a structural tegument protein of a virus binds.

17. The antiviral composition according to claim 16 wherein the virus is Herpes simplex virus, the motor protein is kinesin and the motor protein-like molecule is a mimic of kinesin or a part of kinesin to which the structural tegument protein US11 of Herpes simplex virus binds.

25 18. The antiviral composition according to any one of claims 12 to 14 wherein the compound is a structural tegument-like molecule which binds to a motor protein of a neuron thereby preventing the normal interaction

Sub 04 30 between the neuron or cell with the virus.

19. The antiviral composition according to claim 18 wherein the structural tegument-like molecule comprises a mimic of a viral tegument protein or a part of the tegument protein to which a cellular motor protein binds.

20. The antiviral composition according to claim 19 wherein the virus is Herpes simplex virus, the structural tegument protein is US11, motor protein is kinesin and the structural tegument-like molecule is a mimic of US11 or a part of US11 to which the motor protein kinesin binds.

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